# **CU IN THE WOODS**

**Clemson Extension Forestry and Wildlife Newsletter** 



## **Personal Protective Equipment for Chainsaw** Users

By Patrick Hiesl and Janet Steele

https://blogs.clemson.edu/fnr/2024/01/08/personal-protective-equipment-for-chainsaw-users/

In the first part of this series on chainsaw safety, Patrick Hiesl talked about the safety features of modern chainsaws (<u>https://blogs.clemson.edu/fnr/2023/09/05/</u> <u>the-safety-features-of-a-modern-chainsaw/</u>). Now, we are telling you about the

personal protective equipment available to protect you from most major injuries. For chainsaw users, Personal Protective Equipment, or PPE, includes leg, foot, eye, hearing, face, and hand protection.

Cut-resistant leg protection is the most important PPE item you should consider wearing. For chainsaw users, specific cut-resistant material consisting of ballistic nylon, Kevlar, or other materials has been developed and integrated into pants or chaps that can be worn. Chainsaw chaps (Figure 1) are perhaps the most common leg protection PPE among private forest owners. The cut-resistant material consists of multiple layers of long strings (Figure 2) that, when cut into, will wrap around the cutting teeth of a saw chain and eventually prevent the clutch from engaging. This

typically happens within less than one second. The material creates resistance for battery-powered chainsaws without a clutch and provides an initial jolt that should alert the user to let go of the trigger. We have tried this with a pair of chaps tied down onto a log, and the jolt we felt triggered an automatic reaction to let go of the trigger. It's quite amazing how this works. Wearing chaps can be hot and possibly uncomfortable if you are not used to them, but they work,



Figure 2: Cut-resistant material in chaps is typically embedded as multiple layers of woven material. Photo Credit: Patrick Hiesl, Clemson University. In "How to Stay Safe Around Chainsaws," Land-Grant Press by Clemson Extension, 2022.



Figure 1: Cut-resistant wraparound chaps are one style of chaps that are available to protect your legs from major cut injuries. Photo Credit: Patrick Hiesl, Clemson University. In "How to Stay Safe Around Chainsaws," Land-Grant Press by Clemson Extension, 2022.

mfortable if you are not used to them, but they work, and they will protect the arteries in your legs should the chainsaw ever come too close to your legs. The price for chaps varies depending on the number of protective layers, chap style, and brand, but most range from \$60 to \$130.

Foot protection can come in many forms, and the goal is to keep your feet from getting cut and provide you with stable footing when using a chainsaw. While there are chainsaw boots with cutresistant material embedded in them, their price point is often over \$300. A good pair of hiking or work boots is typically sufficient for forest owners who occasionally use a chainsaw. Composite or steel-toed boots are an continued on page 2

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#### **Upcoming Events**

Find out about all of our upcoming events by visiting our events page: <u>https://www.clemson.edu/extension/</u> forestry/events.html

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#### **PPE for Chainsaw Users cont.**

excellent choice when bucking trees into shorter pieces, especially if there is a risk for cut-offs to drop to the ground. You should avoid using a chainsaw when wearing flip-flops or sandals, as none of them are protecting your feet or providing you with stable footing. While sneakers protect your feet, they often do not provide a stable footing when walking over debris while cutting up a tree.



Figure 3: Impact-rated safety glasses that are safe to use with chainsaws should have the Z87+ lettering on the frame. In this example, the "P" in front of Z87+ indicates the manufacturer of the safety glasses. Photo Credit: Patrick Hiesl, Clemson University. In "How to Stay Safe Around Chainsaws," Land-Grant Press by Clemson Extension, 2022.

#### When working with

a chainsaw, protecting your eyes from flying debris is important. A simple way to protect your eyes is to wear safety glasses. Safety glasses come in clear and tinted versions, are impact-rated, and do not break into small pieces when hit by an object. To ensure your safety glasses are impact-rated, look for the Z87+ label somewhere on the frame (Figure 3). Most sunglasses or reading glasses are not impact-rated and are inappropriate to wear when working with chainsaws, as they can break into small pieces when hit by an object. Another option to protect your eyes would be a face shield. This is a mesh screen that is placed in front of your face that will not only protect your eyes but also your face from flying debris. Face shields are typically part of a forestry helmet system (Figure 4), including a hard hat, face shield, and earmuffs. These systems are a great solution to protect your eyes, face, and hearing and typically cost between \$50 and \$150.

Chainsaws, especially gas-powered chainsaws, are relatively loud, and extended exposure can damage your hearing. Hearing protection is essential and can easily be achieved by using single-use or multi-use earplugs, earmuffs, or a combination of both. Electronic earmuffs and earplugs that cancel loud noises, such as for hunting and shooting sports, are also a great way to protect your hearing. You can damage your hearing in only a few hours without hearing protection.

Lastly, hand protection is strongly suggested when working with chainsaws. Well-fitting leather gloves are a good option when working with chainsaws, as they provide excellent protection when handling wood and

sharpening or adjusting the saw chain. Gloves with cut-resistant material are available for purchase, and they typically consist of cut-resistant material embedded on the top of the left-hand glove. Avoid wearing loose gloves, as they will impact your control over the chainsaw and throttle trigger. We would also advise you to wear gloves that can be closed tightly around the wrist to reduce the accumulation of sawdust in your gloves.



Figure 4: A forestry helmet system consists of a hard hat, mesh face shield, and adjustable earmuffs. Photo Credit: Patrick Hiesl, Clemson University. In "How to Stay Safe Around Chainsaws," Land-Grant Press by Clemson Extension, 2022. Around Chainsaws," Land-Grant Press by Clemson Extension, 2022.

This was a brief overview of the personal protective equipment you should consider wearing when using a chainsaw. Wearing cut-resistant chaps will provide you with a lot of protection from significant cut injuries and is worth the investment. For more details on chainsaw safety and handling see the Land-Grant Press by Clemson Extension article by Patrick Hiesl and Janet Steele (https://lgpress.clemson.edu/publication/how-to-stay-safearound-chainsaws/) and watch out for the next article on the safe handling practices of chainsaws in the CU in the Woods newsletter.

## **Tree Issues: From Conks to Cavities to Decay**

By Carolyn Dawson

https://blogs.clemson.edu/fnr/2024/01/08/tree-issues-from-conks-to-cavities-to-decay/

Winter is rapidly approaching and as the autumn leaves fall, we begin to get a better glimpse of tree trunks and branches. Now is a great time to assess your trees and plan your winter pruning projects or perhaps even tree removals. December through mid-March is the best time to prune trees in our area as they are dormant, won't "bleed" much, are less likely to attract undesirable insects, and are less likely to suffer from diseases. So exactly what should you be looking for? Well, let's start with the easiest and most obvious. summer, and some larger limbs may have broken off halfway from the trunk. The broken half may even be dangling dangerously, waiting to drop at any given moment. All dead, broken and damaged limbs should be pruned out or back accordingly.

For large trees with forked tops, look for staining around the base of the fork. Is the fork holding it water? Have you noticed the fork starting to split? If it were to split, is there a target, say a home or a car to hit? Some forked trees are good candidates for cabling or bracing. This helps recenter the weight of the tree.

Your tree may have suffered storm damage over the

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## Tree Issues: From Conks to Cavities to Decay cont.

Next on the list are tree cavities. Do you see any sunken areas or hollow cavities on the trunk or larger branches? How large is the cavity and where is it located? If you find

a cavity on your tree, you can assume there is an area of decay surrounding it, whether you are able to see it or not. So, there are several things to consider at this point. Wherever the cavity is along the trunk, it has created a structural weakness at that point. If we were to have strong winds and the tree was going to "fail", it would most likely happen at this location. So, how much weight is there above the cavity? Huge large, heavy branches? More importantly, if the tree were to fall, is it within striking distance of a home, garage, boat, cars, or even a child's playground?

Another basic assessment you can do is to see how deep the cavity is. Find a large metal rod or long screwdriver and see how deeply you can poke into the cavity. Is the wood spongy and soft?

Then the level of decay is probably quite significant. If the rod is able to go halfway into the tree, then you know it has rotted halfway through and only half of the tree is supporting the massive weight above.

One test I conduct regularly is to sound out the area with a hammer or mallet. This is a simple test and can be

Mushrooms or conks (pictured) on branches, trunks, or at the base of the tree indicate advanced decay and a high probability of tree failure. Photo credit: R. F. Polomski, ©2021 HGIC, Clemson Extension.

conducted by knocking around the entire tree, from the ground level to as high as you can reach and listening for a hollow resonating sound. You will know it when you

hear it, trust me. Hollow sounds indicate extreme decay and significant loss of structural support.

To finish up the tree cavity assessment, perhaps the easiest sign of significant decay will be seeing conks located on the trunk of the tree. Conks, also called bracket fungus, are basically large hard shelf-like mushrooms growing on the trunk of a tree. If you find them growing closer to the base, it could be an indication of root rot.

One thing you should not do to tree cavities is fill them. Filling a cavity with foam or concrete will not stop the decay and it will not provide additional support. The same goes for pruning. We no longer recommend sealing pruning cuts. Correct pruning cuts will allow your tree to heal naturally and stay healthy.

In closing, I cannot stress enough the location of a hazard tree to a target, a target being people or property. If you have a tree with a structural defect in the trunk within striking distance of people or property, then you should strongly consider having it removed. We all love our trees but they are not worth the destruction of property or most importantly lives.

## **County Forestry Associations**

Abbeville County Forest Landowners Association Contact: Stephen Pohlman spohlma@clemson.edu

Aiken County Forestry Association Contact: Janet Steele jmwatt@clemson.edu

Anderson Forestry & Wildlife Association Contact: Carolyn Dawson dawson4@clemson.edu

Calhoun-Orangeburg Forest Landowners Association Contact: Janet Steele jmwatt@clemson.edu

Chesterfield County Forestry Club Contact: Ryan Bean rbean@clemson.edu Darlington/Florence Landowners Association Contact: TJ Savereno asavere@clemson.edu

Edgefield County Forestry Association Contact: Stephen Pohlman spohlma@clemson.edu

Greenville Forestry & Wildlife Society Contact: Carolyn Dawson dawson4@clemson.edu

Greenwood County Forestry Association Contact: Stephen Pohlman spohlma@clemson.edu

Kershaw County Forest Landowner Association Contact: Ryan Bean rbean@clemson.edu Laurens County Forest Landowners Association Contact: Jeff Fellers fellers@clemson.edu

Lexington County Forestry Association Contact: Janet Steele jmwatt@clemson.edu

Lowcountry Landowners Association (Beaufort, Colleton, Hampton, Jasper) Contact: Amanda Taylor ast4@clemson.edu

McCormick County Forestry Association Contact: Stephen Pohlman spohlma@clemson.edu

Newberry County Forestry Association Contact: Jeff Fellers fellers@clemson.edu Salkehatchie Forestry Association (Allendale, Bamburg and Barnwell) Contact: Janet Steele jmwatt@clemson.edu

Saluda County Forestry Association Contact: Stephen Pohlman spohlma@clemson.edu

Sumter County Forest Landowner Association Contact: Ryan Bean rbean@clemson.edu

**Tri-county Forestry Association** (Berkeley, Charleston, Dorchester) Contact: Amanda Taylor ast4@clemson.edu

Williamsburg County Forest Landowners Association Contact: Tancey Belken tanceyc@clemson.edu

Contact the Association nearest to you to find out about upcoming meetings!



## The Story of the Longleaf Ecosystem

By Janet Steele

https://blogs.clemson.edu/fnr/2024/01/08/the-story-of-the-longleaf-ecosystem/

#### <u>The Longleaf Pine</u>

Among the Southern pines, longleaf pine (*Pinus palustris*) has several key characteristics that have allowed it to grow on some of the harshest sites in the southeastern United States. One is its fire tolerance. Fire is a critical component of the longleaf pine ecosystem, and longleaf evolved with understory species, like the bunchgrasses,

which help spread a fire. The longleaf pine needles are very flammable, providing additional fuel on the forest floor. Longleaf pine is also pruned by fire, which raises the crown of the trees above surface fuels more quickly than other pine species. Finally, longleaf bark thickens as the tree ages, with mature trees having distinctive bark plates.



Another of its most wellknown survival strategies is the time a young longleaf

Longleaf pine stand that has been burned over the years to increase understory grasses. Photo credit: Janet Steele, Clemson Extension.

spends in the grass stage of development. Following germination and establishment, the growth of young trees is focused on establishing a deep taproot, with their above-ground portion looking like clumps of grass. This increases survival chances on the deep, droughty soils where longleaf often grows since the tree will have a sufficient root system established to support itself before it initiates height growth. During this stage, which can last from one year to several years, the trees are also very resistant to fire since a thick tuft of needles surrounds the terminal bud.

Height growth is initiated once the young trees have developed sufficient taproots, which can be over 10 feet long. This is called the "rocket" stage since the stems will begin rapid elongation, often growing several feet in a growing season. Stems in this growth stage look like a bottlebrush, lacking lower limbs. This is the growth stage when the longleaf is most susceptible to damage from a fire until bark thickness increases and the terminal bud is safely above



Longleaf pine in its bottle brush stage. Photo credit: Janet Steele, Clemson Extension.

typical ground fire height. As longleaf pines grow through their sapling stage and into merchantable stands, another survival strategy is their ability to avoid stagnation and respond to thinning with increased growth even at 100 years of age. Longleaf can reach over 100 feet on good quality sites and live 300 years or longer. Its long needles, which can reach over 15 inches, are where its name is derived from.

The density of longleaf pine wood, its resistance to rot, and its straight growth form make it a desirable species for many solid wood products. Additional income can be generated by producing pine straw, and leasing managed longleaf stands for hunting and other recreational activities. Longleaf is naturally more resistant to insects and diseases than the other southern pine species. It can survive and grow on the deepest sand sites where loblolly and slash pine would be severely stunted.

#### The History of Longleaf Pine

The historic range of the longleaf pine ecosystem was 92 million acres and stretched from southeast Virginia to east Texas. Fire has been well documented as the factor that shaped and maintained the longleaf pine ecosystem for thousands of years. Natural fires started by lightning strikes, which occurred most often during the growing season, shaped communities of vegetation dominated by fire-tolerant and fire-dependent species. Stopped only by rainfall or water bodies such as creeks and rivers, these fires burned the landscape in a mosaic pattern, with a frequent return interval. Native Americans adopted fire as their primary tool to continue manipulating the ecosystem, using it to improve wildlife habitat and create more palatable forages, drive game during hunts, make travel easier, and increase their ability to protect themselves from attack by warring tribes. The most significant change that came to the landscape through Native American use of fire was the human-set dormant season fires, which created an even greater mosaic of vegetation stages across the longleaf range.

Early explorers documented the park-like conditions of the open longleaf stands they traveled through and their unique flora and fauna. In William Bartram's exploration of the southeast in the 1770s, he described "a vast forest of the most stately pine trees that can be imagined," stretching as far as he could see over many miles. While Native American populations drastically declined in the 1600s due to diseases brought to the United States by Europeans, early settlers quickly adopted a similar burning regime to maintain grazing for their livestock and improve hunting conditions. However, their use of tools to clear land for agriculture and settlements created one of the earliest declines in the distribution of longleaf pine stands across the landscape.

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## The Story of the Longleaf Ecosystem cont.

The introduction of cotton across the southeast as a cash crop led to even more rapid clearing of longleaf forests for agricultural production. As settlements grew, so did the use of the longleaf forest to produce commodities such as naval stores and other forest products such as lumber and poles. By the mid-1800s, the development of steam-powered locomotives resulted in a faster method of moving forest products to market. Southern pine timber demand continued to increase as northern forest stands were clearcut, and World War I caused a spike in the need for naval stores and lumber. These factors resulted in the beginning of the end for vast acreages of virgin longleaf pine forests by the Great Depression.

The "second forest" of longleaf that followed decades of exploitation was a fraction of the native range and often contained low-quality, widely scattered stems. Longleaf pine's large, heavy seed rarely falls more than 65 feet from the parent tree, and the large-scale harvesting of the virgin stands often left no seedtrees on site. Even with seedtrees on site, irregular bumper seed crops of only every 5 to 7 years allowed competition to develop in the absence of fire, reducing the ability of the seed to contact mineral soil and germinate. Also, the feral hogs introduced by European settlers devastated small longleaf seedlings. The most successful stands of the second forest were found on sites where adequate advanced regeneration was in place when the virgin forest was harvested and where fire continued to be used by landowners. A growing challenge to using fire as a management tool began in the early 1900s as fire began to be viewed as a threat in any forested ecosystem, particularly by land managers from the north and west unfamiliar with the benefits of prescribed burning. The impact of Smokey Bear's message of "Only You Can Prevent Forest Fires" supported the new fire exclusion policies being made by state and federal agencies.

Beginning in the 1930s, a shift to planting loblolly and slash pine began across the southeast to feed the new pulp and paper mills built after the discovery that paper could be manufactured from southern yellow pine. State and federal tree planting efforts, including the Soil Bank Program of the 1950s, further increased the number of acres being converted from longleaf pine to other species. With fire removed from the landscape, the conversion of former longleaf stands to plantation pine, and the further growth of the southeast's population, longleaf pine acreage continued to shrink. By 2000, the ecosystem was at a record low of 3.2 million acres, a loss of 97% across its historic range.

#### **Restoration Efforts in the Longleaf Ecosystem**

The loss of the historic range of longleaf pine has led to the decline of North America's most diverse plant communities. Over 900 plant species have been documented as only occurring in the longleaf ecosystem, with up to 170 species found on a quarter-acre plot. Longleaf stands provide habitat for over 100 bird species, 170 reptiles and amphibians, and over 30 mammals, with 30 species classified as rare, threatened, or endangered (RTE) by the US Fish and Wildlife Service.

Planting of longleaf pine within its native range is a significant focus in the ecosystem's restoration. These efforts have increased the range to a current area of 5.2 million acres, with a goal of 8 million acres by 2040. Millions of dollars from public and private sources have been spent establishing longleaf stands on state, federal, and private lands. Another critical component of restoration efforts is reintroducing prescribed fire in longleaf stands, particularly on private lands. Funding sources for this practice have also been available, but the lack of capacity of qualified burners is still a challenge to meeting annual prescribed fire goals.

Plant restoration efforts focus on increasing native groundcover species, especially those that provide food and cover for ecosystem fauna, as well as those that help carry fire through the understory. These efforts have multi-pronged approaches, including eliminating invasive species, controlling understory and midstory woody stems that become established in the absence of fire, and reseeding with desired species.

Restoration efforts also focus on keystone animal species across the longleaf pine range. The red-cockaded woodpecker, the only woodpecker to build cavities in live trees, was listed as endangered in 1970 due to habitat loss of the mature, fire-maintained pine stands it needs for cavity construction and foraging. Population estimates have been as low as 10,000 birds, or about 1% of the birds' pre-European settlement numbers. In efforts to reduce

the rate of the decline, management has focused on installing artificial cavities, translocating birds to suitable habitats, and increasing the acreage burned in mature pine stands to control midstory vegetation.

In South Carolina, a joint project with several state and federal agencies and conservation groups focusing on the gopher tortoise is an example of efforts to reverse the impacts of longleaf pine habitat loss. The gopher



A recently hatched gopher tortoise. Photo credit: Lisa Lord, The Longleaf Alliance.

tortoise can live up to 50 years old and is unique in that it digs underground burrows that can reach 15 feet long. These burrows provide homes for hundreds of other species and are a refuge when a fire burns

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## The Story of the Longleaf Ecosystem cont.

across the landscape. The gopher tortoise feeds on the vegetation in the understory surrounding its burrows, most of which are fire-dependent plant species. The gopher tortoise's native habitat has been impacted by decades of parcelization and fragmentation, reduction in burning, increases in invasive species and climate change. Conservation efforts are being developed to reverse these impacts before the gopher tortoise populations decline further in the state.

Lisa Lord, Conservation Programs Director with The Longleaf Alliance, recently provided an update on their project. "Increasing and sustaining gopher tortoise populations often requires multiple strategies — from restoring and maintaining longleaf habitat with prescribed fire to improving juvenile survival in the wild. Since 2016, The Longleaf Alliance, UGA Savannah River Ecology Lab and SC Department of Natural Resources have partnered to augment and restore gopher tortoise populations through a technique called "head-starting." About 350 eggs have been collected from wild populations to hatch in captivity and released at two properties in South Carolina. Hatchling tortoises are reared indoors at the Savannah River Ecology Lab for one year to achieve larger body sizes than would occur naturally and thus become more resistant to predation. This practice gives tortoises a greater chance to survive and eventually grow into adulthood".

If you are interested in establishing or managing longleaf pine on your property, please contact your local Clemson Extension FNR team member. Additional resources on longleaf pine management and funding can be found on The Longleaf Alliance website at <u>https://longleafalliance.</u> <u>org/</u> and on the USDA Natural Resources Conservation Services Longleaf Pine Initiative website at <u>https://www.</u> <u>nrcs.usda.gov/programs-initiatives/longleaf-pine-initiative</u>.

## Stumpage Price Trends and Logging Industry in South Carolina

By Puskar Khanal and Crystal Bishop https://blogs.clemson.edu/fnr/2024/01/08/the-story-of-the-longleaf-ecosystem/

#### Pulpwood Stumpage Trends in Q4, 2023

South Carolina statewide average pine pulpwood prices were \$7.59/ton, and the hardwood pulpwood prices were \$7.84/ton in the 4th quarter. Compared to pine and hardwood pulpwood prices in the previous quarter (3rd), it is an increase of 7% and 24%, respectively. Pulpwood prices were doing relatively better at the beginning of the year (1st and 2nd quarter) but continued to decline from the 3rd quarter. The average prices of pine and hardwood pulpwood were \$8.71/ton and \$7.87/ton in South Carolina for the whole year (2023). Overall, the average price for the year 2023 is higher than the prices in the 4th quarter because prices were a lot better in the 1st quarter.



Graph of South Carolina statewide pulpwood stumpage prices for Q1'23 to Q4'23. Graph credit: Puskar Khanal, Clemson University.

#### Sawtimber Stumpage Trends in Q4, 2023

Unlike pulpwood prices, sawtimber prices for both pine and hardwood were higher in the 4th quarter than the 3rd quarter. The statewide pine sawtimber prices were \$23.26/ ton, while mixed hardwood trees sold at \$22.09/ton in the 4th quarter. The average prices of pine and hardwood Page 6 sawtimber were \$23.5/ton and \$22.2/ton in South Carolina for the year 2023. Sawtimber had little change (less than a dollar) in stumpage prices this year.



Graph of South Carolina statewide sawtimber stumpage prices for Q1'23 to Q4'23. Graph credit: Puskar Khanal, Clemson University.

Data credit: The sawtimber and pulpwood price data included in this newsletter are published with permission from TimberMart-South Athens, GA 30605 email <u>tmart@timbermart-south.com</u>.

WOOD MARKET IS LOCAL. Stumpage prices for both sawtimber and pulpwood in your local markets could vary significantly as compared to the above statewide averages depending on size and species composition, quality of timber, total acres and volume, logging operability, distance from nearby mills, and overall market condition.

#### Logging Industry in South Carolina

South Carolina has a vibrant logging industry and is one of the top timber harvesting states in the South.

## Stumpage Price Trends and Logging Industry in SC cont.

Appropriate timber harvesting activities ensure sustainable management of forestry practices and supply. These practices simultaneously contribute to the necessity of raw materials for forest products that industries depend on while generating employment and economic opportunities for local communities in South Carolina. In the recent forestry economic impact report (2020) by SCFC, the logging industry accounted for \$523 million in economic activity and generated 6,087 job opportunities in the state. This industry has seen many changes in terms of the number of loggers and logging technologies over the years. The table below compares South Carolina's logging industry regarding establishments, employees, and payment changes since 2019. These statistics were retrieved from the Labor Department Data Portal for South Carolina.

Table 1: South Carolina's logging establishments, employees, and payment changes between 2019 and 2022.

Item	2022	2021	2020	2019
Establishment #	309	305	307	322
Employee #	2,382	2,371	2,437	2,555
Average weekly wage	\$1,154	\$971	\$915	\$897
Average annual wage	\$59,984	\$50,468	\$47,572	\$45,722

In South Carolina, the number of privately owned logging establishments has declined from 322 to 309 between 2019 and 2022. Likewise, a similar decline in the number of positions mirrored the decline of logging establishments, having declined from 2,555 jobs to 2,382 between 2019 and 2022. This reduction of logging establishments and logging positions is not unique to South Carolina but follows a national trend that has become long-term. Contributing factors to the decline in logger positions could be a suppressed stumpage market, a change in logging technology, and a reduction in the number of sawmills over the years. The job decline could be attributed to major technological improvements to tree felling, skidding, and transporting stumpage to the mill. Modern machines used in logging and hauling these days have created a more efficient working environment, so much so that the days of logging with a saw and skidding to the mills by mule, horses, or oxen are the symbols of a bygone era.

Conversely, the average salary (\$) received by South Carolinian loggers has witnessed an increase in both weekly and annual terms. The average weekly logger wage increased from \$897 to \$1,154 per week, while the average annual salary increased from \$45,722 to \$59,984 between the years 2019 and 2022. Factors contributing to the wage increase are likely higher skill requirements that are now essential for the operation of modern machinery, even as the number of logging establishments decreases in the state.

South Carolina has had a robust and dynamic logging industry from colonial times to the present day. Historically, Sumter County had 31 sawmills and was renowned as the lumber capital of South Carolina. Today, logging companies are well distributed all over the state, but select counties do have a higher number than others. For example, the majority of logging companies in South Carolina are in the following counties: Georgetown (26), Colleton (20), Florence (16), Hampton (12), and Spartanburg (11).

## **Upcoming Events**

**January 25th**- Learn to Burn Workshop Andrews, South Carolina- Contact <u>Tancey Belken</u>

January 27th- <u>Firebreak Construction Workshop</u> Aiken, South Carolina- Contact <u>Janet Steele</u>

**February 6th**- <u>Nuisance Wildlife Meeting</u> Florence, South Carolina- Contact <u>Tancey Belken</u>

**March 1st**- <u>Urban Tree Health Workshop</u> Hilton Head, South Carolina- Contact <u>Amanda Taylor</u>

March 7th & 14th- Silvopasture Webinar Series Contact Janet Steele

**March 16th**- <u>Bradford Pear Bounty</u> Marion County, South Carolina- Contact <u>Tancey Belken</u> April 11th- <u>Silvopasture Field Day</u> Contact <u>Janet Steele</u>

**April 24th**- Invasive Plant Management Workshop Blackville, South Carolina- Contact <u>Janet Steele</u>

#### **Other Events**

January 30th - March 5th- Southern Regional Extension Forestry- <u>Silvopasture Webinar Series</u>

Chainsaw Safety and Tree Felling Workshops Dates and Locations TBD- Contact Janet Steele

Forest Products Mill Tour- Newberry and Laurens Counties, Date TBD- Contact Janet Steele

SC Women Owning Woodlands Workshop Pee Dee Region, May 2024- Contact Janet Steele



Several members of our Clemson Extension Forestry and Wildlife Program Team had the opportunity to participate in a portable sawmill training last fall. Team members from left to right include: Jaime Pohlman, TJ Savereno, Ryan Bean, Patrick Hiesl, Matt Burns (Extension Leadership Team), Jeff Fellers, Janet Steele, Cory Heaton, Stephen Pohlman, Derrick Phinney. Photo credit: Kathy Coleman, Clemson Extension.

## **Contact our Agents:**

#### Agent

Ryan Bean Tancey Belken Carolyn Dawson Jeff Fellers Derrick Phinney Jaime Pohlman Stephen Pohlman TJ Savereno Janet Steele Amanda Taylor

## Email

rbean@clemson.edu tanceyc@clemson.edu dawson4@clemson.edu fellers@clemson.edu dphinne@clemson.edu jaime@clemson.edu spohlma@clemson.edu asavere@clemson.edu jmwatt@clemson.edu ast4@clemson.edu

#### **Counties Covered**

Chesterfield, Fairfield, Kershaw, Lancaster, Sumter, Richland Berkeley, Charleston, Florence, Georgetown, Horry, Marion, Williamsburg Anderson, Cherokee, Greenville, Oconee, Pickens, Spartanburg Chester, Laurens, Newberry, Union, York Statewide Program Team Leader McCormick, Statewide Communications Responsibilities Abbeville, Edgefield, Greenwood, McCormick, Saluda Clarendon, Darlington, Dillon, Florence, Lee, Marlboro Aiken, Bamburg, Barnwell, Calhoun Lexington, Orangeburg Allendale, Beaufort, Charleston, Colleton, Dorchester, Hampton, Jasper

#### Specialist

Lance Beecher Dave Coyle Cory Heaton Patrick Hiesl Puskar Khanal Marzieh Motallebi

#### Background

er Aquaponics, Aquaculture and Fisheries Forest Health and Invasive Species Wildlife Management Forest Operations and Forest Products al Forest Economics allebi Ecological Economics and Carbon Credits

Newsletters are archived online at: https://www.clemson.edu/extension/forestry/resources/newsletter.html

Newsletter edited by Jaime Pohlman and reviewed by Amanda Taylor

Clemson Extension Forestry and Wildlife Program Team-Contact: Derrick Phinney <u>dphinne@clemson.edu</u>



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